

CLAIMS

1. An elastic endless crawler comprising an annular belt-shaped elastic crawler body and cords having ends, said cords being disposed substantially parallel with one another at predetermined intervals and embedded in the crawler body, such that the one end and the other end of each cord overlap, as seen from the belt side.

2. The elastic endless crawler of claim 1, comprising, members disposed at at least one of a inner peripheral side of the crawler and a outer peripheral side of the crawler, which members hold the cord ends within the rubber crawler body to prevent the tips of the cords from protruding out of the crawler body during use of the crawler.

3. The elastic endless crawler of claim 1, wherein cores are formed to protrude from an inner peripheral side of the crawler, and the ends of each cord are located at a posterior region of one of the cores.

4. The elastic endless crawler of claim 1, comprising driven protrusions, which are formed so as to protrude from an inner peripheral side of the crawler, wherein the ends of each cord are located at a posterior region of at least one of the driven protrusions.

5. The elastic endless crawler of claim 1, comprising lugs, which are formed to protrude from an outer peripheral side of the crawler, and the ends of each

cord are located at a posterior region of one of the lugs.

6. The elastic endless crawler of claim 1, comprising an annular surface extending in a peripheral direction of the rubber crawler, wherein most of each cord is disposed within the annular surface.

7. The elastic endless crawler of claim 1, comprising a one bias sheet that is embedded concentrically to the cords.

8. The elastic endless crawler of claim 1, wherein essentially every cord has a regularity that the one end of the cord be positioned adjacent to the other end of the same cord.

9. The elastic endless crawler of claim 8, comprising a bias sheet having a characteristic of counterbalancing an urging force, which urging force is caused by the cord arrangement having said regularity.

10. The elastic endless crawler of claim 1, wherein the cords are arranged so as to form a substantially symmetrical configuration relative to a centerline extending in the crawler peripheral direction.

11. The elastic endless crawler of claim 1, wherein an outline, which connect the ends of one side of the cords and an outline which connect the ends of the other side of the cords each shows a stepped configuration, as seen from a side substantially perpendicular to the belt body.

12. The elastic endless crawler of claim 1, the cords further comprising a first main cord and a second main cord, wherein a winding direction of the first main cord is the opposite of that of the second main cord, the first main cord and the second main cord being arranged in substantially the same surface and separated from each other relative to a centerline extending in the crawler lengthwise direction.

13. The elastic endless crawler of claim 12, wherein bias cords or compensation cords are provided with a predefined bias angle whose winding direction is reversed from that of the respective main cords, said bias cords or compensation cords being juxtaposed with the main cords.

14. The elastic endless crawler of claim 12, wherein the first main cords and bias cords, which has a winding direction opposite to that of the first main cords, are juxtaposed with each other, and the second main cords and bias cords whose winding direction is reversed from that of the second main cords are juxtaposed with each other.

15. The elastic endless crawler of claim 13, wherein the bias cords are embedded more to an outer peripheral side of the crawler or more to a ground-contacting surface side than the main cords.

16. The elastic endless crawler of claim 12, comprising cores embedded therein at predetermined intervals along the crawler lengthwise direction,

wherein the main cords and the bias cords are embedded between the cores and a ground-contacting surface.

17. An elastic sheet used for manufacturing an annular belt-shaped elastic crawler in which cords having ends are embedded within the crawler body such that one end and the other end of each cord are overlapped, as seen from the belt side, the sheet comprising:

a sheet body; and

cords having ends, which cords are embedded within the sheet body such that the cords are disposed substantially parallel with one another at a predetermined pitch.

18. The elastic sheet of claim 17, wherein the sheet body of the elastic sheet is formed of rubber.

19. A method of manufacturing an elastic endless crawler, the method comprising the steps of:

(A) forming an elastic sheet, which includes a sheet body and cords having ends embedded within the sheet body, said cords being disposed substantially parallel with one another at predetermined pitches;

(B) forming a non-endless belt which includes two end portions of the elastic sheet and the remaining portion of the elastic sheet, with said remaining portion being coated with a predetermined material; and

(C) overlapping the two end portions of the non-endless belt and then applying pressure to them such that they are integrated and that one end

and the other end of each cord are overlapped, as seen from a side of the belt.

20. The manufacturing method of claim 19, wherein the method comprises a step for coating uncoated sheet part to obtain a finished belt after the integration of the end portions.

21. The manufacturing method of claim 19, wherein the coating comprises vulcanizing.

22. The manufacturing method of claim 19, wherein the belt forming step further comprises disposing members to hold the cord tips within the belt body so as to prevent the cord tips to run off from the belt body during use , wherein said members are disposed at at least one of the inner peripheral side and the outer peripheral side of the annular belt.

23. A method of manufacturing an elastic endless crawler, comprising the steps of:

(A) forming an elastic sheet, which includes a sheet body and cords having ends embedded within the sheet body, said cords being disposed substantially parallel with one another at predetermined pitches;

(B) overlapping the two end portions of the non-endless belt and then applying pressure to integrate the end portions, while simultaneously making the one end and the other end of each cord are overlap, as seen from the belt side; and

(C) forming an annular belt, in which the elastic sheet is entirely

coated with a predetermined material.

24. The manufacturing method of Claim 23, wherein the coating comprises a vulcanizing process.

~~25. The manufacturing method of Claim 23, wherein the belt forming step~~
comprises a step in which a plurality of members to hold the cord tips within the belt body so as to prevent the cord tips to run off from the belt body during use are provided at at least one of the inner peripheral side and the outer peripheral side of the annular belt.